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The moths, eleven in number, appeared July 13th to August 27th, accompanied by many minute parasitic flies awaiting identification. My only observations relating to the time of emergence were that one imago was found with its wings dry, and another with them hardly dry, at 7.5 a.m., neither having been out at 11 p.m. on the previous night. Both sexes show much variation in size, and a certain amount in colour, for although the pale ground-colour is remarkably constant throughout the fifty specimens, from various English localities, before me, some of them are much more heavily shaded and streaked with deep fuscous and black than others.

Norden, Corfe Castle: January 30th, 1906.

NOTES ON CERTAIN PALÆARCTIC SPECIES OF THE GENUS HEMEROBIUS:

THE MADEIRA-CANARIAN SPECIES ALLIED TO  $H.\ HUMULI,$  AND OTHER SPECIES FROM THE SAME ISLANDS.

BY KENNETH J. MORTON, F.E.S.

Shortly before his death, Mr. McLachlan had in view the publication of a paper on that species of Hemerobius which occurs in Madeira and the Canary Islands, sometimes called H. humuli, but which has long been known to possess at least four sectors instead of the normal number of three found in H. humuli proper. Thanks to the Rev. Mr. Eaton, further material, including the 3, had been put into Mr. McLachlan's hands, and the latter had arrived at the conclusion that the insect was quite distinct as a species from H. humuli. At his request I prepared figures of the appendages, which quite supported Mr. McLachlan's views on the subject. These figures, unfortunately, are not now available, but Mr. Eaton, who again collected in Teneriffe and Madeira in the spring of 1904, has kindly presented to me a series of the insect in good condition, thus enabling me to describe the species. Before doing so, it may be desirable to allude briefly to the previous references to the insect.

The species was, I presume, first taken by Wollaston, and is noticed by Hagen in Ent. Mo. Mag., vol. ii, p. 60, 1865. Hagen at first was uncertain whether the specimen would not form a distinct species, but he failed to find any difference, beyond the greater number of sectors, separating it from *H. humuli*. "The colours, facies and markings," he says, "are absolutely identical."

Brauer (Sitzungsbericht der Kais. Academie der Wissenschaften in Wien, Mathem-naturw. Classe, Bd. eix, Abth. i, July, 1900) reporting on the *Neuroptera* found in the Canaries by Prof. O. Simony, practically accepts the species as *H. humuli*, remarking on the greater number of sectors.

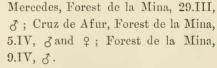
McLachlan (Journal of Lin. Soc., Zool., vol. xvi, p. 162, 1882) refers to three  $\mathfrak P$  (Madeira, Wollaston, one  $\mathfrak P$ , probably that mentioned by Hagen; near Funchal, 19th November, Eaton, one  $\mathfrak P$ ; Orotava, Teneriffe, 15th December, Eaton, one  $\mathfrak P$ ). He points out the difference in the number of sectors, mentioning the presence of five in one anterior wing and a slightly different facies, but he adds that it would not be prudent to give a new name without seeing the  $\mathfrak F$ , at that time unknown.

I now describe the species as

## HEMEROBIUS EATONI, n. sp.

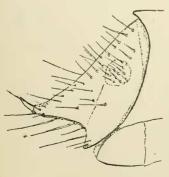
Dusky yellow with the sides of the thorax broadly blackish-brown, traces of brown also on the sides of the head above; cheeks brown to black; palpi sometimes blackish; antennæ yellowish with annulations of very variable distinctness. Abdomen sometimes showing traces of the thoracic yellow on the proximal segments, otherwise blackish or brown above, paler beneath. Legs pale, the tarsi rarely annulated. Anterior wings broad-oval, apex obtuse, costal margin not abruptly broader at the base; sub-basal spot, as a rule, distinct, with one or two other conspicuous spots on the same nervure; origin of the sectors also distinctly spotted: sectors four or five; gradate nervules dark, clouded with greyish; dorsal and outer margins clouded with grey; neuration regularly, and usually rather closely, interrupted with fine dark points whence arise faint, angulate grey markings. Appendages similar to those of H. humuli except that the upper limb of the fork terminates in a simple point. Expanse, 15—17.5 mm.

Teneriffe: La Laguna, 25.II, 9; Güimar, 20.III, 3; Las



The figure shows the apex of the abdomen seen from the side.

The species has the form of H. humuli, but in the character of the markings it much more resembles H. orotypus, Wall., but is not so greylooking, the wings having a faint yellowish tinge.



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Hemerobius subnebulosus, Steph.—This species is not mentioned in McLachlan's 1882 paper, but is recorded by him from Madeira, Ent. Mo. Mag., vol. xxxv, p. 79, 1899. Mr. Eaton has given it to me from Funchal and Caniçal in Madeira. It is perhaps worthy of remark that H. nervosus is not mentioned by McLachlan in 1899 as occurring in Madeira or the Canaries, while in 1882 he recorded it from both groups, with the caution, however, that he had seen only the  $\mathfrak P$  from Madeira, and even with regard to the  $\mathfrak F$  seen (Brullé's type of H. hirtus and one taken by Wollaston) from the Canaries, he leaves the matter in a little uncertainty, the appendages having been in a position unsuitable for their examination. One specimen of H. nervosus is recorded by Brauer without indication as to its sex. Fresh material of H. nervosus is desirable.

Hemerobius stigma, Steph.—One ? from Monte, Funchal, 13.IV. This species is not referred to by the above-named authors.

McLachlan records *Hemerobius elegans*, Stephens, from Grand Canary (Eaton), a strongly marked example. A small *Hemerobius* of the size of *H. elegans* was taken by Mr. Eaton at Funchal, 14.IV, 1904. It is probably a new species but I hesitate to describe it until I have seen more material of this and other allied forms

13, Blackford Road, Edinburgh: May, 1906.

## PSEUDISOBRACHIUM CANTIANUM:

A SPECIES OF BETHYLINÆ (PROCTOTRYPIDÆ) NEW TO SCIENCE.

BY ARTHUR J. CHITTY, M.A., F.E.S.

Apterous. Mouth situate at anterior extremity of the head. Antennæ with 13 joints. Ocelli wanting. Eyes indistinct. No scutellum. Mesothorax with 3 lobes. Metathorax narrowed into a neck at base, distinct from the mesothorax. Metanotum without a channel and with the posterior angles rounded. Intermediate tibiæ spined externally. (The above characters are generic, and are only given by me to show they have not been overlooked).

Head oblong, wider in front than behind, and narrowed before posterior angles which are slightly rounded; distinctly and rather closely punctured, more closely at the sides than on the disc; smooth between the punctures (except quite in front where the surface appears rugulose), with scattered pale hairs which are more visible on the margins than on the disc. Mandibles long when closed, forming a semicircular protection to the trophi, slightly hairy. Eyes unicolorous with head and difficult to see. Antennæ inserted between the base of mandibles on depressions in front of the head, these depressions being separated by a very fine